

VERSION OF AMENDMENTS SHOWING MARKINGS

In the Claims

1. (currently amended) A post packaging alignable optical coupling comprising:
 - a base;
 - a first optical element for receiving or transmitting an optical signal, said first optical element located in a fixed condition on said base;
 - a second optical element for receiving or transmitting an optical signal;
 - a mirror interposed to intercept an optical signal from one or the other of said optical elements, said mirror ~~moveable~~ moveably disposed with respect to said base;
 - a MEMS actuator, said MEMS actuator supporting said mirror to enable repositioning said mirror to thereby direct the optical signal from said first optical element into alignment with said second optical element or vice versa; and
 - a shroud encompassing said optical elements with a free space located between said optical elements to therein enable remotely repositioning the mirror with the MEMS actuator when the shroud extends over the optical elements.
2. (currently amended) The optical coupling of claim 1 wherein the second optical element is fixedly mounted to the ~~housing~~ base.
3. (original) The optical coupling of claim 2 wherein at least one of the optical elements is an optical fiber or optical waveguide.
4. (currently amended) The optical coupling of claim 3 wherein the first optical element and the second optical element are located in a ~~transverse~~ transverse condition from each other.

5. (currently amended) The optical coupling of claim 4 wherein the first optical element and the second optical element ~~transmission conductor~~ are located at substantially a right angle to each other.
6. (original) The optical coupling of claim 3 wherein the optical coupling includes at least four optical elements.
7. Canceled
8. Canceled
9. Canceled
10. (currently amended) A method of packaging an optical coupling comprising:
 - mounting a first optical element to a base;
 - mounting a positionable mirror on said base so that an optical signal from the first optical element impinges on the positionable mirror;
 - mounting a second optical element to the base;
 - placing a shroud over the first optical ~~elements~~ element ~~and~~ , the mirror and at least a portion of the second optical ~~conductor~~ element to form an enclosure; and
 - repositioning the mirror after the optical coupling is packaged to bring an optical signal from the first optical element into alignment with the second optical element or vice versa.
11. (original) The method of claim 10 wherein the repositioning of the mirror to align an optical signal from said first optical element to said second optical element is done through rotation and tilting the mirror.
12. (original) The method of claim 10 including mounting a third optical element to said base and mounting a fourth optical element to said base and mounting a further repositionable mirror

therebetween to thereby permit alignment of a further optical signal between said third optical element to said fourth optical element by repositioning said further repositionable mirror.

13. (original) The method of claim 10 wherein mounting the first optical element comprises fixedly mounting an optical conductor to said base.

14. (original) The method of claim 13 wherein mounting the second optical element comprises fixedly mounted said second optical element to said base.

15. (original) The method of claim 10 where a MEMS actuator is mounted to said base and to said mirror to enable remote positioning of said mirror to thereby bring an optical signal from said first optical element into alignment with said second optical element or vice versa.

16. (currently amended) An optical coupling comprising:

- a base;
- a first optical element for receiving or transmitting an optical signal, said optical element located in a fixed condition on said base;
- a second optical element having an optical port for receiving or transmitting an optical signal;
- a shroud encapsulates the optical elements and the mirror located in the optical coupling;
- a repositionable mirror, said mirror having a reflecting surface larger than an optical port, said mirror positioned to intercept an optical signal emanating from said first optical element; and
- a mirror positioning system located on said base to thereby allow an operator to reposition said mirror until the optical signal from said first optical element is in optical communication with said second optical element with said mirror positioning system controllable from a position removed from the base.


17. (original) The optical coupling of claim 16 wherein the optical signal is reflected about 90 degrees.

18. (original) The optical coupling of claim 16 wherein each of the optical elements are fixedly mounted in the optical coupling.

19. Canceled

20. (original) The optical coupling of claim 17 wherein the optical coupling is assembled with the optical elements in a non optical communication and the optical elements are brought into optical communication after the optical coupling is packaged for shipment.

Respectfully submitted,
JACOBSON AND JOHNSON

By 
Carl L. Johnson, Reg. No. 24,273
Attorneys for Applicant
Jacobson and Johnson
Suite 285
One West Water Street
St. Paul, Minnesota 55107-2080

Telephone: 651- 222-3775